# **PREREQUISITES**

## To complete this project you should have the following software and packages.

### **Anaconda Navigator:**

Anaconda Navigator is a free and open- source distribution of the python and R programming languages for data science and machine learning related applications. It can be installed on windows, Linux, and Mac OS. Conda is an open- source, cross- platform, package management system. Anaconda comes with so very nice tools like JupyterLab, Jupyter Notebook, Qtconsole, Spyder, Glueviz, Orange, RStudio, Visual studio code. For this project, we will be using Jupiter notebook and Spyder.

To install Anaconda Navigator and to know how to use Jupiter notebook a Spyder using Anaconda.

#### Tensor flow:

Tensor flow is an end-to-end open- source platform for machine learning. It has a comprehensive, flexible ecosystem of tools, libraries, and community resources that lets researchers push the state-of-the-art in ML and developers can easily build and deploy ML powered applications.

#### Keras:

Keras leverages various optimization techniques to take high level neural network API easier and more performant. It supports the following features:

- Consistent, simple and extensible API.
- Minimal structure easy to achieve the result without any frills.
- It supports multiple platforms and backends.
- It is user friendly framework which runs on both CPU and GPU.
- Highly scalability of computation.

#### Flask:

Web framework used for building web applications.